Remarks

The Office Action mailed October 19, 2004 and made final has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-31 are pending in this application. Claims 1-30 stand rejected. Claim 31 is newly added. No new matter has been added.

A fee calculation sheet for newly added claim 31 along with authorization to charge a deposit account in the amount of the calculated fee is submitted herewith.

The rejection of Claims 1-20 under 35 U.S.C. § 112, second paragraph, as being indefinite is respectfully traversed.

The Office rejected Claim 1 because the function of the database was not recited. The database has been deleted from Claim 1 as amended. Thus, this rejection no longer applies.

The Office rejected Claims 3 and 6 because of the term "a distribution of auction outcomes" recited therein. The indefinite article in these Claims has been changed to a definite article, and it is thus submitted that the rejection no longer applies to Claims 3 and 6 as amended.

The Office rejected Claim 11 because the function of the "at least one client system" was not recited. Claim 11 has been amended to recite "...at least one client system connected to said server through a network and configured to access said database via said server...". Thus, this rejection no longer applies.

Claims 2, 4, 5, 7-10, and 12-20 were rejected under 35 U.S.C. § 112 solely due to their dependencies. It is submitted that the rejection of Claims 2, 4, 5, 7-10, and 12-20 under 35 U.S.C. § 112 no longer applies in view of the amendments made herein to Claims 1, 3, 6, and 11.

For at least the reasons stated above, it is respectfully requested that the rejection of Claims 1-20 under 35 U.S.C. § 112 be withdrawn.

The rejection of Claims 1-30 under 35 U.S.C. § 103(a) as being unpatentable over the combination of the McMullan[1], Geissler, Duffield et al., and Carey articles is respectfully traversed.

McMullan is directed to a forecasting process using computer applications, including project management systems, to control project costs. (See Abstract on page 1.) On page 10, McMullan asserts that at least one program is known to perform a Monte Carlo simulation or iteration by which a randomly generated number selects values for each budget item form [sic] its cumulative probability curve until a total cost curve is computed. The final result is a computer-generated cumulative probability curve. However, McMullan does not describe or suggest using a Monte Carlo simulation (or any other type of simulation) to determine a statistical distribution of possible bid values from competing bidders in a sealed bid auction, the selection of a bid value, the random sampling of possible competing bid values to generate an auction scenario, or the determination of a probability that the user-selected bid value is greater than the randomly sampled competing bid values included in the auction scenario. Instead, McMullan appears to be teaching the use of Monte Carlo techniques to sample budget item costs resulting from a plurality of risk parameters having different distributions to determine a cumulative probability distribution curve for the total cost.

Geissler describes methods by which French corporations generally manage their financial risks. (Abstract) On page 5, Geissler mentions that Monte-Carlo simulation is used to generate a number of random joint scenarios on N parameters and to compute explicit probability distributions for the variables, the control of which is critical for management -- essentially the cost of the debt or the margin between income for the assets and the cost of liabilities. However, Geissler does not teach or suggest using a Monte Carlo simulation (or any other type of simulation) to determine a statistical distribution of possible bid values from competing bidders, the selection of a bid value, the random sampling of possible competing bid values to generate an auction scenario, or the determination of a probability that the user-selected bid value is greater than the randomly sampled competing bid values included in the auction scenario. Instead,

[1] The Office refers to the article entitled "Cost forecasting -- beyond the crystal ball" as "McCullan." However, the print-out provided by the Office uses the spelling "McMullan," so the article shall be referred to herein by the latter name.

Geissler appears to be teaching risk management as an iterative process based upon (i) identifying danger areas and indifference areas through time for control variables, wherein the areas represent a company's subjective perception of its aversion to risk; (ii) designing a specific derivative that will protect the control variables and take advantage of the indifference areas; and only then (iii) performing a Monte Carlo analysis on a resulting new balance sheet to assess the efficiency of the solution, possibly including testing extreme and unlikely scenarios (see page 5-6.)

Moreover, there is no teaching or suggestion by Geissler to use Monte Carlo or any other type of simulation in a sealed, competitive bidding scenario for a tranche. It may perhaps arguably be suggested to use Monte Carlo methods to determine risks in a single project or in a derivative instrument or asset of some kind. Such a technique, if it were fairly suggested by this combination of art, may arguably be useful for *evaluating* a tranche. However, even assuming, *arguendo*, that this technique is fairly suggested, the technique is nevertheless distinct from, and would not suggest to one of ordinary skill in the art, the generation of a sealed bid auction scenario with competitive bids for a tranche.

Duffield is directed to inference and optimal design for a welfare measure in dichotomous choice contingent valuation, which is a preferred valuation method for nonmarket valuation problems. The dichotomous choice format is a preferred format because it costs less than either an open-ended or bidding game format and thus can be used in mail surveys. The format also encourages participation, and has no starting bid bias. (See title and abstract). Duffield merely discusses the results of a Monte Carlo simulation in which logit models (using equation [14], which is not available in the supplied copy of the Duffield reference) fitted to the cash and hypothetical goose data are treated as true models, and the results of changing the sample allocation while keeping the total sample size fixed are analyzed.

The Office asserted that Duffield teaches a system and method using a Monte Carlo simulation process for arriving at an optimal bid in an auction system at page 10-11, and that Duffield discloses determining a probability that a user selected bid value is greater than a randomly sampled competing bid value included in an auction scenario at page 11. However, in the paragraph above the heading "Monte Carlo Simulation" on page 10, Duffield discloses that

the purpose of the Monte Carlo simulations is to explore the issue of whether standard errors for T_m from the logit model also respond to certain optimization rules. This purpose is quite different from and does not suggest determining an optimum bid in an auction scenario. Moreover, the Monte Carlo simulations in Duffield are based upon bids already made and known from a mail survey sample of individuals. (See the second full paragraph on page 9.) Accordingly, Duffield does not describe or teach using Monte Carlo simulations by a *buyer* in a sealed auction, competitive bidding scenario to determine a winning bid at an optimal bid price.

Carey is directed to limiting the chance of unusually large losses in a portfolio of bonds. (See abstract and page 1 generally.) Carey examines two characteristics of private debt portfolio credit risk loss rate distributions, conditional on individual asset risk and other portfolio characteristics. (See first full paragraph, page 2.) Loss rates in the bad tail of a portfolio loss distribution, conditional on portfolio characteristics, are estimated by Monte Carlo resampling methods. Simulated portfolios are constructed by drawing assets randomly from the total sample while enforcing diversification targets and limits. The method is said to provide good nonparametric estimates of loss rate distributions if draws were from the universe of possible assets and outcomes, and if all characteristics used by portfolio managers in selecting assets were modeled. The sample used by Carey may yield reasonably representative results for the sensitivity of the bad tail to changes in diversification strategy. (See fourth full paragraph, page 2.)

The Monte Carlo results are said to be a potentially useful resource in the design of securitizations, in financial intermediary risk management, and in the setting of regulatory capital requirements. (See last paragraph, page 2.) However, nowhere does Carey teach or suggest using such techniques in a competitive, sealed bid auction scenario to determine a winning bid at an optimal bid price.

By contrast, Applicants' Claim 1, as herein amended, recites, "... using the computer to determine a statistical distribution of possible bid values from competing bidders in the sealed bid auction for at least one tranche included within a portfolio of assets...selecting by the user a bid value for the at least one tranche for comparing against a random sample of competing bid values; randomly sampling the statistical distribution of possible competing bid values to

generate one possible auction scenario...and determining a probability that the user selected bid value is greater than the randomly sampled competing bid values included in the auction scenario." At most, Duffield describes the sampling of bid values from a distribution determined from bids *received* in an auction scenario, and the remaining references either indicate that random sampling or simulation is a known technique and may be used to value assets or reduce costs. But no combination of cited references teaches or suggests any determination of a statistical distribution of possible bid values from competing bidders in a sealed bid auction, or the random sampling of possible competing bid values from this statistical distribution to determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in this type of auction scenario. Thus, it is submitted that Claim 1, as herein amended, is patentable over the combination of McMullan, Geissler, Duffield, and Carey.

Claims 2-10 depend directly or indirectly upon Claim 1. When the recitations of Claims 2-10 are considered in combination with the recitations of Claim 1, it is submitted that Claims 2-10 are likewise patentable over the combination of McMullan, Geissler, Duffield, and Carey.

Claim 11, as herein amended, recites a system comprising, among other things, a computer configured as a server and configured to perform a method essentially similar to that of Claim 1. Thus, it is submitted that Claim 11 is patentable over the combination of McMullan, Geissler, Duffield, and Carey for reasons that correspond to those given with respect to Claim 1.

Claims 12-20 depend directly or indirectly upon Claim 11. When the recitations of Claims 12-20 are considered in combination with the recitations of Claim 11, it is submitted that Claims 12-20 are likewise patentable over the combination of McMullan, Geissler, Duffield, and Carey.

Claim 21, as herein amended, recites a computer for determining a winning bid that is configured to perform steps similar to those recited in Claim 1 and those similar to that which the server performs in Claim 11. Thus, it is submitted that Claim 21 is patentable over the combination of McMullan, Geissler, Duffield, and Carey for reasons that correspond to those given with respect to Claims 1 and 11.

Claims 22-30 are directly or indirectly dependent upon Claim 21. When the recitations of Claims 22-30 are considered in combination with the recitations of Claim 21, it is submitted that Claims 22-30 are likewise patentable over the combination of McMullan, Geissler, Duffield, and Carey.

For the reasons given above, it is respectfully requested that the rejection of Claims 1-30 under 35 U.S.C. § 103(a) as being unpatentable over the combination of the McMullan, Geissler, Duffield et al., and Carey articles be withdrawn.

Claim 31 is new, and is patentable over the cited references at least because of its dependency upon Claim 1, for the same reasons given with respect to Claim 1. Claim 31 further recites the steps of "... fully underwriting each asset included within a first portion of the asset portfolio including underwriting in a full cash manner to generate a full value table, and underwriting in a partial cash manner to generate a partial value table...grouping and underwriting a sample of assets included within a second portion of the asset portfolio...using the computer to statistically infer a value for each asset included within a third portion of the asset portfolio...and using the full value table and the partial value table, the underwriting of the sample of assets within the second portion of the asset portfolio, and the statistically inferred values of assets included in the third portion of the asset portfolio to select a bid value for said at least one tranche." Some of the cited references may arguably suggest statistical valuation techniques for assets. However, none of the cited references teaches or suggests the combination of methods recited in Claim 31, and none of the cited references teaches or suggests using this combination of methods to select a bid that is then further used in a simulation of a sealed-bid auction scenario. Thus, Claim 31 is also patentable for at least this additional reason.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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